

Customer No. 24498
Attorney Docket No. PU030240
Office Action Date: December 4, 2009

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Remarks/Arguments

Claims 1 – 6, 17, 20 – 30 are pending. Claims 7 – 16 and 18 – 19 have been canceled. Claims 23 – 30 are newly added claims. Claims 1, 4 – 6, 17, and 20 – 22 have been amended to more clearly and distinctly claim the subject matter that Applicant regards as the invention. Support for the amended and new claims can be found in paragraphs [0021] – [0031] and in Figs. 2 – 4. No new matter is believed to be added by the present amendment.

Rejection of claims 1- 16 under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Application No.2004/0086127 to Candelore (hereinafter Candelore).

Applicant submits that for at least the following reasons, claims 1 -6, 17, and 20 – 30 are not anticipated by Candelore.

The claimed invention is directed to a system that provides a quicker response to a user's request to change channels. The system is required to determine control words, or descrambling keys, which are transmitted with program data on a particular channel and are used to descramble a digital transport stream associated with a selected channel before the program data can be processed for display, which may increase the time between channel changes. Amended claims 1 – 16 overcomes this problem by monitoring non-selected channels to derive and store the control word, or the descrambling key, for each of the non-selected channels or "potential viewing channels" that occurs prior to the user actually selecting a new channel. The system does not have to actually tune to the monitored channel and actually start processing the program data from that channel for display, rather the system monitors the channels to derive the necessary control words, or descrambling keys prior to actual selection of the channels. As a result, the control words or descrambling keys are readily available if and when the user selects a new channel.

The Examiner alleges that the claimed invention is disclosed in Candelore. at paragraphs [0033], [0036], [0062]-[0064] as follows: "*Headend 410 delivers service keys on per channel basis. The service key is used by a processor 430 as needed when tuning to different channels. The service key is used to decrypt the descrambling keys that in turn descramble the content and the content is then presented through the display 160 in a perceivable format.*" Applicant respectfully disagrees that Candelore discloses each and every feature of the claimed invention.

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The service key of Cadelore is associated with a service provider. It is used to descramble content from the service provider upon authentication that the digital receiver is permitted to receive content from the service provider. The service keys may be transmitted in an Entitlement Management Message (EMM) to an authorized digital receiver. Alternatively, they are sent in response to a service key request message in cases, for example, where payment is needed to access the content. However, Cadelore does not recite, teach, or suggest monitoring the non-selected channels to derive the descrambling key included with the non-selected channels prior to the user actually selecting the channel.

Amended independent claim 1 recites the feature of a "*wherein the set of descrambling keys includes at least one descrambling key for an unselected channel, the at least one descrambling key being submitted with program data on the unselected channel that differs from the user-selected channel, and which is derived from monitoring the unselected channel and used when the unselected channel is subsequently selected by a user*" As noted above, this feature is not recited in Cadelore and as such, independent claim 1 is not anticipated by Cadelore.

Cadelore refers to a service key, however, that service key does not appear to correspond to the recited descrambling key. In the present invention, the descrambling keys are transmitted with the program data on a particular channel. The problem addressed by the present invention arises due to the fact that these descrambling keys are carried with the program data. Due to this arrangement, the system must first tune to the channel, acquire the descrambling keys and then use the keys to descramble the program data. The present invention addresses the problem by monitoring the unselected channels to "pre-determine" the descrambling keys.

By contrast, the service keys of Cadelore do not appear to be transmitted with program data on a particular channel. In fact, in one of the alternative embodiments, Cadelore mentions the possibility of using the service keys to decrypt the descrambling key which are received in-hand with the scrambled content (see paragraph 0063). The descrambling keys to be decrypted according to Cadelore appear to correspond to the descrambling keys recited in the present claims. Nowhere does Cadelore disclose or suggest any arrangement for pre-processing of such descrambling keys, and certainly, with regard to monitoring of unselected channels for such descrambling keys.

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Accordingly, amended claim 1 and its dependent claims are not anticipated by Candelore. The remaining independent claims, 5, 17, 20, and 26, and the claims that depend on them, similarly recite the above-referenced feature and are not anticipated by Candelore for the same reasons as discussed with respect to amended claim 1.

Rejection of claims 17 - 22 under 35 U.S.C. 103(a) as being unpatentable over U.S. 5,933,192 to Crosby (hereinafter Crosby) and Candelore.

Applicant submits that for at least the following reasons, claims 1 - 6, 17, and 20 - 30 are patentable over Crosby and Candelore.

Crosby pertains to tuning and decoding two separately-tuned channels. While one channel is currently being tuned and decoded, the system pre-tunes to a predicted channel and begins processing the program in that pre-tuned channel so that the processed information is available when the user actually tunes to that channel. For this reason, the system of Crosby has two tuners and two decoders. The additional tuner does not monitor other non-selected channels, rather the tuner actually tunes to the predicted channel and processes the data included in that predicted channel.

By contrast, in the claimed invention, the system does not have to actually tune to a "non-selected channel" or "potential viewing channel" and actually start processing the data from that channel. Instead, the system of the claimed invention monitors the "potential viewing channel" or "non-selected channel" to derive the necessary control words, or descrambling keys. As a result, the control words or descrambling keys are readily available if and when the user selects that "potential viewing channel" or "non-selected channel." For at least this reason, Crosby does not recite, teach or suggest the step of "*monitoring a non-selected channel*" or "*monitoring a potential viewing channel*" as recited in the independent claims.

Furthermore, one skilled in the art would not combine Crosby and Candelore to obtain the claimed invention. In fact, Crosby teaches away from the claimed invention by teaching to pre-tune to a predicted channel which requires duplicate tuners and decoders and additional processing. Such a system requires more elements and processing to be performed than one in which non-selected channels are monitored to obtain certain information for future use. Additionally, since Crosby teaches that a head end already provides a set of the necessary service keys, there is no reason for the system of Crosby to tune another channel before the user selects that channel.

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Additionally, in view of at least the foregoing, Applicant submits that Crosby and Candelore fail to teach or suggest each and every limitation of the subject claims. A person ordinarily skilled in art would not find it obvious to combine the teachings of Crosby and Candelore and further to modify them to arrive at the claimed invention without the benefit of the impermissible hindsight.

Therefore, claims 1 - 6, 17, and 20 - 30 are patentable over Crosby and Candelore, either singly or in combination.

Conclusion

Having fully addressed the Examiner's rejections it is believed that, in view of the preceding amendments and remarks, this application stands in condition for allowance. Accordingly then, reconsideration and allowance are respectfully solicited. If, however, the Examiner is of the opinion that such action cannot be taken, the Examiner is invited to contact the Applicant's attorney at (609) 734-6815, so that a mutually convenient date and time for a telephonic interview may be scheduled.

It is believed that there are no additional fees due with regard to the filing of this response. However if there is an additional fee due, please charge the fee, or credit any overpayment, to Deposit Account No. 07-0832.

Respectfully submitted,



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